CHANGE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

8130.2E CHG 1

6/20/2003

SUBJ: AIRWORTHINESS CERTIFICATION OF AIRCRAFT AND RELATED PRODUCTS

1. PURPOSE. This change transmits revised pages to Order 8130.2E, Airworthiness Certification of Aircraft and Related Products.

2. DISTRIBUTION. This order is distributed to the Washington headquarters branch levels of the Aircraft Certification Service, Flight Standards Service, and the Regulatory Support Division; to the Aviation System Standards office; to the branch level in the Aircraft Certification Service directorates and regional Flight Standards Service divisions; to all aircraft certification offices; to all manufacturing inspection district offices and manufacturing inspection satellite offices; to all flight standards district offices; to the Aircraft Certification Branch and Flight Standards Branch at the FAA Academy; to the Brussels Aircraft Certification Division and Flight Standards staff; to applicable representatives of the Administrator; and to all international field offices.

3. EXPLANATION OF CHANGES. This change is to paragraph 63 and clarifies airworthiness certification requirements and processes for aircraft built from spare and/or surplus parts (§ 21.183(d) of Title 14, Code of Federal Regulations). This change establishes procedures for accomplishing original airworthiness certification of aircraft built from spare and/or surplus parts. The procedures in this change apply to Aircraft Certification Service engineers and inspectors, all Flight Standards Service inspectors, and any appropriately authorized designees (see change for authorized use of designees).

4. DISPOSITION OF TRANSMITTAL. Retain this transmittal sheet until the directive is canceled by a new directive.

5. PAGE CONTROL CHART. See attached page control chart.

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Initiated By: AIR-200

PAGE CONTROL CHART

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57 through 63	1/23/2003	57, 58, 58-1, 58-2, 58-3 (and 58-4), and 59 through 63	6/20/2003
64	1/23/2003	64	1/23/2003

/s/
Frank P. Paskiewicz
Manager, Production and
Airworthiness Division, AIR-200

CHAPTER 1. INTRODUCTION

1. PURPOSE. This order establishes procedures for accomplishing original and recurrent airworthiness certification of aircraft and related products. The procedures contained in this order apply to Federal Aviation Administration (FAA) manufacturing aviation safety inspectors (ASI), to FAA airworthiness ASIs, and to private persons or organizations delegated authority to issue airworthiness certificates and related approvals.

2. DISTRIBUTION. This order is distributed to the Washington headquarters branch levels of the Aircraft Certification Service, Flight Standards Service, and the Regulatory Support Division; to the Aviation System Standards office; to the branch level in the Aircraft Certification Service directorates and regional Flight Standards Service divisions; to all aircraft certification offices; to all manufacturing inspection district offices and manufacturing inspection satellite offices; to all flight standards district offices; to the Aircraft Certification Branch and Flight Standards Branch at the FAA Academy; to the Brussels Aircraft Certification Division and Flight Standards staff; to applicable representatives of the Administrator; and to all international field offices.

3. CANCELLATION. FAA Order 8130.2D, Airworthiness Certification of Aircraft and Related Products, dated September 30, 1999; FAA Order 8050.4, Misuse of Aircraft Identification Plates, dated November 21, 1984; and FAA Order 8050.5, Repainting Aircraft Nationality and Identification Marks (N-Number), dated December 17, 1984, are cancelled.

4. AUTHORITY TO CHANGE THIS ORDER. The issuance, revision, or cancellation of the material in this order is the responsibility of the Aircraft Certification Service, Production and Airworthiness Division, AIR-200. All changes, as required, will be accomplished by this division to carry out the agency's responsibility to provide for original and recurrent airworthiness certifications and related approvals for eligible aeronautical products.

5. DEVIATIONS. Adherence to the procedures in this order is necessary for uniform administration of this directive material. Any deviations from this guidance material must be coordinated and approved by AIR-200. If a deviation becomes necessary, the FAA employee involved should ensure the deviations are substantiated, documented, and concurred with by the appropriate supervisor. The deviation must be submitted to AIR-200 for review and approval. The limits of Federal protection for FAA employees are defined by Title 28, United States Code § 2679.

6. FORMS. Examples of forms referenced in this order are found at the end of the section or chapter in which they are referenced.

7. ACRONYMS. The following acronyms are used in this order:

AC	advisory circular
ACO	aircraft certification office
AD	airworthiness directive
APIS	approved production inspection system
ASI	aviation safety inspector
BAA	Bilateral Airworthiness Agreement
BASA	Bilateral Aviation Safety Agreement
CAA	Civil Aviation Authority

	CAGE	Commercial and Government Entity
	CAM	Civil Aeronautics Manual
	CAR	Civil Air Regulation
	CFR	Code of Federal Regulations
	14 CFR	Title 14, Code of Federal Regulations
	CG	center of gravity
	CHDO	certificate holding district office
*	**CMACO**	certificate management aircraft certification office *
	CMO	certificate management office
	CMU	certificate management unit
	C of A	Certificate of Airworthiness
	CO	certificating office
	DA	Department of the Army
	DAR	designated airworthiness representative
	DAS	designated alteration station
	DD 1427	DOD Form 1427, Notice of Award, Statement, and Release Document
	DER	designated engineering representative
	DGAC	Direction Générale de l'Aviation Civile
	DMIR	designated manufacturing inspection representative
	DOA	delegation option authorization
	DOD	Department of Defense
	DOT	Department of Transportation
	DRMO	Defense Reutilization Marketing Office
	EAA	Experimental Aircraft Association
	ELT	emergency locator transmitter
	FAA	Federal Aviation Administration
	FSCAP	flight safety-critical aircraft part
	FSDO	flight standards district office
	GPO	Government Printing Office
	ICAO	International Civil Aviation Organization
	ICAW	Instructions for Continued Airworthiness
	ID	identification
	IFO	international field office
	IFR	instrument flight rules
	IPC	illustrated parts catalog
	JAR	Joint Aviation Requirements
	MCAI	Mandatory Continuing Airworthiness Information
	MIDO	manufacturing inspection district office
	MIO	manufacturing inspection office
	MISO	manufacturing inspection satellite office
	NTSB	National Transportation Safety Board
	ODAR	organizational designated airworthiness representative
	PAH	production approval holder
	PC	production certificate
	PCA	primary category aircraft
	PI	principal inspector

PMA	parts manufacturer approval
R&D	research and development
RPM	revolutions per minute
SFA	special flight authorization
SFAR	Special Federal Aviation Regulation
STC	supplemental type certificate
49 U.S.C.	Title 49, United States Code
TC	type certificate
TCDS	type certificate data sheet
TPA	turbine-powered aircraft
TSO	technical standard order
U.S.	United States
VFR	visual flight rules
VLA	very light aircraft

8. DEFINITIONS. Some of the definitions included in part 1 of Title 14, Code of Federal Regulations (14 CFR) and other publications are listed below.

a. Aircraft Category. The term "category," as used with respect to the certification of aircraft, means a grouping of aircraft based on their intended use or operating limitations, for example, normal, utility, acrobatic, or primary. For purposes of this order, gliders and balloons will be referred to as categories rather than classifications.

b. Aircraft Classification. The term "classification," as used with respect to the certification of aircraft, means a broad grouping of aircraft having similar characteristics of propulsion, flight, or landing, that is, airplane, rotorcraft, glider, or balloon.

c. Bilateral Agreement. The term "bilateral agreement" means an executive agreement between the U.S. Government and the government of another country to facilitate the airworthiness approval or acceptance of civil aeronautical products exported from one country (contracting state) to the other. There are two types of bilateral agreements related to airworthiness: Bilateral Airworthiness Agreements (BAA) and Bilateral Aviation Safety Agreements (BASA). These agreements are not trade agreements, but rather technical cooperation agreements. These agreements are intended to provide a framework for the airworthiness authority of the importing country to give maximum practicable credit to airworthiness certification functions performed by the airworthiness authority of the exporting country using its own certification system.

d. Category of Special Airworthiness Certificates. The term "category" also is used to identify the six specific certification processes and the six types of special airworthiness certificates issued.

e. Certification Office. The FAA certification office at which the applicant applies for airworthiness certification or related approval: manufacturing inspection district office (MIDO), manufacturing inspection satellite office (MISO), flight standards district office (FSDO), international field office (IFO), certificate management office (CMO), certificate management unit (CMU), or the Brussels Aircraft Certification Division.

f. Classification of Airworthiness Certificates. The term "classification" also is used to distinguish between the standard and special airworthiness certification processes and certificates.

g. Critical Characteristic. Any feature throughout the life cycle of a flight safety-critical aircraft part (FSCAP) which, if nonconforming, missing, or degraded, could cause a catastrophic failure resulting in loss or serious damage to the aircraft or an uncommanded engine shutdown resulting in an unsafe condition. A characteristic can be critical in terms of dimension, tolerance, finish, or material; an assembly, manufacturing, or inspection process; or an operation, field maintenance, or depot overhaul requirement. A manufacturing-critical characteristic is produced during the manufacturing process. An installation-critical characteristic, such as torque, is critical in terms of assembly or installation.

h. DOD CAGE Code. The Department of Defense Commercial and Government Entity (DOD CAGE) code identifies the manufacturer of the part or product produced under government contract.

i. Dual-Use Product or Part. Any product or part manufactured for civil application by a production approval holder (PAH) authorized by the FAA and produced under a U.S. military contract. The military product (or part thereof) has the same part number and configuration as its civil counterpart and is manufactured using the same FAA-approved design, materials, and manufacturing processes. This could also include any product or part originally produced for the military which currently holds a normal, utility, acrobatic, or transport type certificate (TC) issued under 14 CFR part 21, Certification Procedures for Products and Parts, § 21.27.

j. Exception. A case in which a rule, general principle, etc., does not apply.

k. Exemption. Approval to be free from current regulations in 14 CFR.

l. Flight Safety-Critical Aircraft Part. Any part, assembly, or installation containing a critical characteristic whose failure, malfunction, or absence could cause (1) a catastrophic failure resulting in loss or serious damage to the aircraft, or (2) an uncommanded engine shutdown resulting in an unsafe condition.

m. Manufacturer. Any PAH or delegation option authorization (DOA).

n. Military Surplus Product or Part. A product or part that originally was released as surplus by the U.S. military, even if subsequently resold by a manufacturer, owner/operator, repair facility, or any other parts supplier.

o. Military-Unique FSCAP. Any FSCAP specifically and uniquely designed and manufactured for the U.S. military, for which there is no corresponding FAA-approved type design or PAH engine, propeller, or part produced for civilian application. Breakout products or parts produced specifically for military use by a manufacturer other than an FAA PAH using military-provided designs, drawings, and specifications also are considered military-unique.

p. Part Out. To remove a part from or disassemble an aircraft, engine, propeller, or assembly of parts.

q. Production Approval Holder. A holder of a production certificate (PC), an approved production inspection system (APIS), a parts manufacturer approval (PMA), or a technical standard order (TSO) authorization who controls the design and quality of a product or part thereof.

63. AIRCRAFT BUILT FROM SPARE AND/OR SURPLUS PARTS.

* **a. General.** This section provides guidance and instructions on issuing a standard airworthiness certificate (under § 21.183(d)) for an aircraft assembled from spare and/or surplus parts when the aircraft has a TC issued under § 21.21, § 21.27, or § 21.29. The FAA will discuss the following items with the applicant, each of which applies to each aircraft to be certificated:

(1) This policy is not intended for serial production of aircraft as identified in § 21.183(a) or (b). If an applicant intends to assemble multiple aircraft under the guidance of this paragraph and is not the TC holder, the Aircraft Certification Service directorate manager will be informed and concur before the ASI takes any actions in regard to multiple aircraft assembly and certification.

(2) If an applicant contacts the MIDO/MISO/CMO/CMU or FSDO prior to purchasing or building an aircraft assembled from spare and/or surplus parts, the applicant should be advised that it might be difficult or impossible to satisfy all the requirements for an airworthiness certificate. Establishing conformity of completed aircraft, subassemblies, and detail parts to a type design may be difficult or impossible. A prospective applicant should review the type design or aircraft specifications and any other records that will be used to substantiate conformity to a type design.

(3) Building aircraft from spare and/or surplus parts does not include the repair of destroyed aircraft. However, parts obtained from a destroyed aircraft may be used provided the parts are inspected and tested as required to ensure they are acceptable for installation and conform to the type design used to substantiate conformity. For such parts, the applicant must ensure all applicable requirements of part 43 are complied with.

(4) For any STC the applicant intends to incorporate into the aircraft during assembly, the applicant must own or have written permission from the STC holder/owner permitting the use of the STC.

(5) If an applicant intends to assemble multiple aircraft, the ASI will initially perform the airworthiness functions, such as the conformity inspections of subassemblies and detail parts. The ASI will always perform the final airworthiness certification of the aircraft.

(6) Section 21.303(b)(2) does not provide authority to produce parts needed for the assembly of a new aircraft built from spare and/or surplus parts.

b. Applicant Responsibilities. An applicant must show that the products, parts, components, and individual assemblies meet the airworthiness and environmental standards that are the basis for their individual approvals. In addition, the collectively assembled aircraft will satisfy the certification basis identified on the referenced type certificate and meet the applicable requirements of § 21.183(d) and any special conditions prescribed by the FAA. The applicant begins by submitting a design package to the cognizant (local) FAA ACO. *

* **(1)** The applicant will deliver to the local ACO a compatibility document/matrix to show what STCs are proposed for installation on each aircraft. The matrix should show that the applicant has reviewed the STCs and determined that there are no compatibility issues. The local ACO review is an evaluation as to how the applicant made the determination of compatibility. The compatibility document will be submitted to and accepted by the local ACO and certificate management ACO (CMACO) (the ACO that manages the current TC) prior to certifying the aircraft.

(2) The applicant will submit to its local ACO a complete design package for each aircraft. The design package used for one aircraft will not automatically grant approval for the next aircraft. The type design data must meet the requirements in § 21.183(d) (as defined in FAA Order 8110.4, Type Certification) and be complete enough to allow the FAA to verify that any PMA parts or TSO articles/appliances meet the TC requirements. Only FAA-approved design data will be submitted. Field repair manuals or illustrated parts breakdowns will not be submitted; they are FAA-accepted data, not FAA-approved data. Military manuals or drawings will not be submitted; they are not FAA-accepted or -approved data. In addition, the requirements of §§ 21.5, 21.50, and 21.99 need to be complied with as applicable. The following are items that should be included in the design package. However, the ACO/CMACO may request additional documentation as needed.

(a) A master drawing list, which will consist of a complete description of each aircraft type design configuration, including all STCs and a list of the PMA parts, TSO articles/appliances, and owner/operator-produced parts, which make up the configuration of each aircraft. The master drawing list will be the basis for determining conformity to a TC for each aircraft.

> **NOTE: This list should include installation instructions, process specifications, the drawing or document number, revision level, engineering change orders in effect, the date prepared, and the approval dates of all material.**

(b) The aircraft assembly plan, so that the ASI is able to determine when different assembly processes will take place.

(c) The proposed weight and balance process.

(d) The proposed flight test procedure. The applicant must flight test each aircraft in accordance with an FAA-approved production flight test procedure and flight check-off format as prescribed by § 21.127. An FAA flight test engineer will approve the flight test procedure.

(3) The local ACO will verify the design package is complete and then forward it to the CMACO that manages the current/original type certificate project. The CMACO and local ACO will perform a review and validation of the design data to ensure the data are approved and current. A DER will not perform this approval/review process. Order 8110.4 contains more detailed requirements for adequacy of a design package.

(4) The applicant will maintain and make available to the FAA when requested all supporting documents such as manufacturers' invoices, suppliers' affidavits, packing lists, parts lists, material certification sheets, and other acceptable records to provide traceability of raw stock and parts to their origin and to provide a basis of approval. *

* **(5)** The applicant will submit to the FAA a complete conformity folder for each aircraft and Form 8130-9 certifying that the completed aircraft conforms to the FAA-approved data for this project at the time an application for an airworthiness certificate is submitted. In addition to the design package and STC compatibility documents, the conformity folder will include all STCs, inspection checklists, flight test records, and documentation for the specific aircraft being certificated. The build/inspection checklists will include the initials/stamp of the individuals who performed the work and/or inspections and, upon completion, the typed and/or printed name and signature of the applicant.

c. FAA Responsibilities. The ASI needs to explain to the applicant that because the applicant is not required to have a quality control system the same as a PAH, it is the applicant's responsibility to demonstrate to the FAA that each aircraft conforms to the TC and is in condition for safe operation. However, subsequent to presenting anything to the FAA, the applicant must ensure compliance with all airworthiness requirements in place at the time of presentation. In addition to the requirements of section 1 of this chapter, the FAA will use the following guidance to establish that the aircraft conforms to its type design as approved by the ACO/CMACO:

(1) FAA Form 8130-11, Checklist and Inspection Record, Aircraft Built from Spare and Surplus Parts (figure 3-7 is a reproducible sample), will be used during the conformity process. The completed checklist will be included in the permanent airworthiness certification record package forwarded to AFS-750.

(2) The ASI must verify the aircraft is assembled from approved materials, parts, and assemblies that conform to the FAA-approved type design for that particular model. The ASI must review the appropriate documents as presented by the applicant, substantiating FAA production approval status of these parts available.

(3) The ASI must verify that any major changes to the approved design package have been approved by the appropriate ACO/CMACO.

(4) Used parts and assemblies with established service life-limited parts must be proven airworthy and accompanied by appropriate historical records to substantiate time in service. Such evidence, together with other maintenance records, should be returned to the applicant and made part of the aircraft historical records. Life-limited items without historical records substantiating their eligibility cannot be accepted for certification on aircraft.

(5) The serial number of the aircraft does not have to appear on the aircraft specification, TCDS, or aircraft listing to be eligible for a standard airworthiness certificate. The aircraft serial number is used primarily for the purpose of individual identification of an aircraft. Under 49 U.S.C. § 44704, it need only be shown that the aircraft conforms to its FAA-approved TC and is in a condition for safe operation for the aircraft to be eligible for a standard airworthiness certificate.

(6) The ASI must ensure the applicant provides parts catalogs, assembly and/or maintenance manuals (as may be produced by the original equipment manufacturer), or the equivalent, for use as a guide by the FAA during all phases of the aircraft assembly inspections. *

* **(7)** After the product CMACO reviews the design package and finds it to be acceptable, the ASI uses the package and any other relevant information to develop a conformity inspection plan. The ASI reviews the plan with the applicant and the ACO and/or MIDO to determine the following:

(a) What processes, if any, are to be considered critical and require ASI mandatory inspection acceptance points.

(b) Where mandatory FAA conformity inspection points will be placed. At this point, the assembly plan can be used to forecast when these inspections will be accomplished. These inspections will not be bypassed by the applicant and may require a work stoppage if anything requiring inspection could be covered by further assembly.

(c) That the applicant's incoming parts and raw stock meet all TC requirements and are free of shipping and handling damage. Supporting documents such as manufacturers' invoices, suppliers' affidavits, packing lists, parts lists, material certification sheets, and other acceptable records will be maintained and made available to the FAA.

(d) That the applicant has a process in place to ensure any special tooling meets all needed calibration requirements (for example, torque wrenches, assembly jigs, any equipment used to calibrate flight instrumentation). This process must be traceable to the National Institute of Standards and Technology.

(e) That all parts and material are in compliance with approved design data. The following guidance will establish compliance:

1 FAA-approved parts obtained from a PAH, and eligible for installation on this make and model, will be free of shipping and handling damage and meet applicable type design data.

2 New parts fabricated will be properly manufactured, meet all applicable type design data requirements, and meet the airworthiness requirements of the FAA regulations applicable to the product on which the part is to be installed.

3 Used parts meet all applicable requirements of part 43. These parts will possess an airworthiness approval tag (Form 8130-3) documenting they are airworthy and approved for return to service.

4 The applicant will make available all purchase orders and documentation to provide traceability of parts to their origin and to provide the basis of approval for the part. These documents will be available at the time of certification and used to verify the accuracy of the part information contained in the master drawing list. The ASI will review the part traceability (origin) information at the time of certification.

(f) That the aircraft identification and registration marking is correct and has been properly processed through AFS-750.

(g) That there is a process to ensure the reporting of failures, malfunctions, and defects for continued airworthiness will be accomplished. *

* **(8)** The ASI will perform all initial conformity inspections. However, with the MIO manager's approval and if the applicant intends to assemble multiple aircraft, the ASI may turn over to the designee the conformity inspection for each aircraft after the initial aircraft. The designee must not change the conformity inspection plan.

(9) The ASI will witness the applicant weigh the aircraft to determine empty weight and center of gravity. A weight and balance report will be submitted at the time of airworthiness certification. FAA-H-8083-1, Aircraft Weight and Balance Handbook, is a good source of guidance to use during this operation.

(10) The ASI will review the completed FAA-approved flight check-off form to verify flight test completion. The aircraft must be flight tested by the applicant in accordance with an FAA-approved production flight test procedure and flight check-off format as prescribed by § 21.127. A DER will not perform this approval/review process.

(11) The ASI will review the Form 8130-9 certifying the completed aircraft conforms to the applicable FAA-approved data for this project. Any major deviations to the TC must be described on the statement of conformity and approved by FAA engineering. When submitting Form 8130-9 for an aircraft built from spare and/or surplus parts, cross out the phrase in section IV, item B, "produced under type certificate only (FAR 21 subpart F)" (see figure 3-8) and enter below that item the TC, specification, or listing numbers as applicable.

(12) A new ID plate will be reviewed by the FAA before installation on the aircraft to verify it meets the requirements of §§ 45.11 and 45.13. The builder's name would be that of the person who assembled the aircraft and not the name of the TC owner/manufacturer who builds the same model of aircraft (see figure 3-2). The model designation is that of the aircraft type design to which conformity is determined. The serial number selected by the builder should be clearly distinguishable from the TC holder's serial numbers, for example, the serial number could be the builder's name or initials together with a number.

(13) The FAA should list supporting documents such as manufacturers' invoices, suppliers' affidavits, packing lists, parts lists, material certification sheets, and other acceptable records submitted by the applicant on Form 8100-1, which becomes part of the checklist and inspection record. The basis for determining conformity with the FAA-approved data for this project will be established and become a matter of record for future reference.

(14) The MIDO/MISO/CMO/CMU or FSDO issuing the standard airworthiness certificate will ensure a copy of Form 8100-2 and Form 8130-6 are forwarded to the CMACO. The CMACO will review this documentation and update the applicable TCDS to ensure tracking for continued operational safety. *

64. SCREENING OF SURPLUS MILITARY AIRCRAFT. This paragraph provides guidance and instructions on establishing the basic eligibility of surplus military aircraft for airworthiness certification under the provisions of § 21.183(d) when an FAA TC has been issued under the provisions of §§ 21.21, 21.27, and 21.29.

a. Initial Screening Inspection. The initial screening inspection will determine whether the aircraft has reasonable potential for airworthiness certification. Inspections may be performed on some, but not all, surplus military aircraft before they are offered for sale to the public. Aircraft determined to have "no potential" for airworthiness certification during the initial screening inspection, for example, because of an initial lack of military service historical/modification records, may later be presented for rescreening if adequate cause is demonstrated by the owner. The FAA inspector performing the initial inspection or reinspection must submit FAA Form 8130-10, Surplus Military Aircraft Inspection Record (figures 3-9 and 3-10) for each inspection to the appropriate manufacturing inspection office (MIO). Aircraft may be considered potentially certifiable when the manufacturer's ID plate is installed and the aircraft military records are adequate to determine the historical background of the aircraft. At a minimum, the initial screening inspection must consist of the following:

(1) An examination of the aircraft ID plate(s) to determine military model number, serial number, date of manufacture, and any other pertinent data.

(2) A review of military maintenance manuals and modification records affecting the subject aircraft regarding its current status of mandatory maintenance, for example, the military equivalent to FAA ADs. The records may be considered adequate for potential certification purposes when the following is determined:

(a) All major repairs/modifications and military safety-of-flight items have been properly documented in accordance with prescribed military directives.

(b) The historical records document all known replacement of parts or assemblies.

(c) The historical records document a current list of life-limited parts or assemblies and their current status on the subject aircraft.

(d) The following are typical DOD records that should be reviewed during the screening inspection process. These examples are for surplus Army military aircraft:

1 DA Form 2408-5, Equipment Modification Record;

2 DA Form 2408-13, Aircraft Status Information Record;

3 DA Form 2408-15, Aircraft Historical Record for Aircraft; and

4 DA Form 2408-16, Aircraft Component Historical Record.

(e) The historical records document the maximum weight limits, airspeeds, and operating regimes that have been exceeded as described in the applicable military flight manuals, technical directives, and aircraft specifications. If any of these limits have been exceeded, this information must be recorded on Form 8130-10. The FAA will not make any determination as to what, if any, adverse effects may have resulted from exceeding the described limits. If these limits are exceeded, the MIDO will contact the cognizant FAA engineering office for its appraisal.

(3) An examination of the aircraft to determine its degree of completeness, state of preservation and repair, and general condition. This examination is not necessarily all-inclusive, is for information only, and does not guarantee approval of an airworthiness certificate.

b. Aircraft Condition. The condition of the aircraft and its historical records, as found during the initial screening inspection, must be noted on Form 8130-10 for each aircraft. This information will be used for future reference. Upon completion of the above, the FAA inspector who conducted the initial screening inspection must render an opinion as to whether the aircraft has reasonable potential for an airworthiness certificate.

c. Screening Report. All inspection findings must be recorded on Form 8130-10. The original form and appropriate attachments must be forwarded to the appropriate MIO within 5 working days after completion of the inspection (see figures 3-9 and 3-10).

65. CONFORMITY CERTIFICATE—MILITARY AIRCRAFT.

a. Contractual agreements between segments of the military services and a manufacturer may require the manufacturer to provide FAA Form 8130-2, Conformity Certificate—Military Aircraft (see figure 3-11), for each aircraft procured. Such aircraft must be type-certificated and, in most cases, be manufactured under the terms of a PC.

b. By mutual agreement between the FAA and the military services, the FAA may have certain other responsibilities related to the issuance of Form 8130-2. Except as provided in this paragraph, and in any specific requirements in the memorandum of understanding, the normal inspection and surveillance procedures relating to production under a TC or under a PC should be met.

c. The completed original Form 8130-2 must be given to the authorized military representative. The cognizant MIDO, or FSDO when delegated, must forward a copy, including those issued by DOA manufacturers, to the appropriate MIO for indefinite retention. The copies may be forwarded either separately or all in one package at the end of the military contract or at the discretion of the directorate.

> **NOTE: If such military aircraft are eventually sold as surplus and presented for civil certification, it is the applicant's responsibility to furnish Form 8130-2 with the application when the form is necessary as a part of the airworthiness determination. If the applicant cannot obtain the original or a legible copy of the completed conformity certificate, the ASI or authorized designee may request a copy through his or her supervising office from the cognizant military office.**

66. ISSUANCE OF STANDARD AIRWORTHINESS CERTIFICATES, SURPLUS MILITARY AIRCRAFT. Form 8100-2 (figure 3-12) may be issued when the applicant shows, and the FAA finds, that the aircraft conforms to the FAA-approved type design (including applicable modifications incorporated by an amendment to the TC or STC) and is in a condition for safe operation. A standard airworthiness certificate may be issued for a surplus military aircraft under § 21.183(d) when an FAA TC has been issued under §§ 21.21, 21.27, or 21.29. A copy of Form 8130-2, which should have been issued to the military service at the time the aircraft was accepted, must be made available to the FAA representative or authorized designee by the applicant. This document is necessary to establish basic conformity, including documenting any deviations that may have been in existence at the time of manufacture. This procedure applies to a complete aircraft operated by the military service and released as a complete aircraft from the military service. Adequate military maintenance records must be made available to assist in determining conformity.

67. CERTIFICATION REQUIREMENTS (APPLICANT). The following are documents and other information that are typically used by an applicant to show compliance with the airworthiness certification requirements of § 21.183(d):

a. Proof of ownership in the form of a DOD Bill of Sale is considered to be recordable evidence and proof of ownership. DOD Form 1427, Notice of Award, Statement, and Release Document (DD 1427), is considered to be proof of ownership only. The DD 1427 is not a bill of sale and cannot be used for registering the aircraft. When an aircraft is sold for recovery of parts or reduction to scrap, a bill of sale is not issued.

b. Compliance and conformity to the TC, taking into account any STCs or any amendments to the TC. The applicant must present evidence that the aircraft conforms to the type design. The type design data used to determine conformity must be shown in the applicant's records. The following are typical records that may be used:

(1) Records maintained by the military, the manufacturer, or any other prior owner pertaining to the manufacturing, inspection, maintenance, and operation of the aircraft. Military records may be used to determine continuous conformity while the aircraft was in military service.

(2) Form 8130-2 or prior airworthiness certificate issued by the FAA, if any.

(3) Records such as the TCDS or aircraft specifications that establish, by manufacturer's serial number, that the complete aircraft was produced under an FAA PC or APIS and the extent to which it was so produced.

(4) When components and parts have been replaced since original manufacture, the applicant must show that they are airworthy and eligible for installation.

(5) Records of any components and parts that have been fabricated or assembled by the applicant establishing that they conform to the type design.

(6) Records of engines, gearbox assemblies, landing gear, instruments, or other components or parts establishing that they originally conformed to the type design and have been maintained in accordance with applicable FAA requirements. Military maintenance and/or FAA-approved repair station records may be used for this purpose.

(7) When military records are being used to substantiate any portion(s) of conformity to FAA-approved type design, the applicant must show that the records for that specific aircraft, component, or part are complete and accurate.

(8) An approved flight test procedure and flight checkoff form must be established (when a flight test is deemed necessary) and each aircraft must be flight tested by the applicant's pilot in accordance with that procedure. The FAA production flight test will not be conducted until an entry has been placed in the aircraft records to show that these tests have been satisfactorily completed by the applicant.

(9) The civil and military model designation is reflected on the ID plate (§ 45.13) and all airworthiness documentation, including airworthiness certificates (excluding registration), reflects the civil and military model designation and serial number. The military designation and serial number must be placed in parentheses in the same blocks as the civil model designation and serial number.

c. Form 8130-9 with an outline explaining determination of conformity.

d. A current weight and balance report from an actual weighing of the aircraft.

e. Records that indicate that all applicable ADs have been complied with.

f. Records of inspection required by § 21.183(d)(2).

68. CERTIFICATION PROCEDURES. The following are some of the typical steps taken by the FAA representative or his authorized designee toward certification of the aircraft in conjunction with those specified in paragraph 46 of this order:

a. Ensure that the application is complete and correct.

b. Inspect the aircraft and review records to determine the following:

(1) Compliance and conformity with the TC, taking into account any STCs or any amendments to the TC.

(2) Compliance with applicable ADs.

(3) Currency of weight and balance information from actual weighing; it is recommended that the ASI observe the actual weighing.

(4) Which inspections and tests, including flight tests, are required to find that the aircraft is in a condition for safe operation. The FAA production flight test requirements will be coordinated with FAA flight test personnel.

(5) That an approved flight test procedure and flight checkoff form has been established (when a flight test is deemed necessary) and that each aircraft is flight tested by the applicant's pilot in accordance with that procedure. The FAA production flight tests will not be conducted until an entry has been placed in the aircraft records to show that these tests have been satisfactorily completed by the applicant.

(6) Compliance with the registration and marking requirements of parts 47 and 45.

(7) That the civil model designation is reflected on the ID plate and that all of the airworthiness documentation, including registration and airworthiness certificates, reflect the civil and military model designation and serial number. The military designation and serial number should be placed in parentheses in the same blocks as the civil model designation and serial number.

69. EXAMPLES OF FORMS. Figures 3-1 through 3-16 provide examples of forms used in the certification process.

70.-85. RESERVED.

FIGURE 3-1. SAMPLE FORM 8100-2, STANDARD AIRWORTHINESS CERTIFICATE, NEW AIRCRAFT (FACE SIDE)

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION-FEDERAL AVIATION ADMINISTRATION

STANDARD AIRWORTHINESS CERTIFICATE

1 NATIONALITY AND REGISTRATION MARKS	2 MANUFACTURER AND MODEL	3 AIRCRAFT SERIAL NUMBER	4 CATEGORY
N12345	Douglas DC-6A	43219	Transport

5 AUTHORITY AND BASIS FOR ISSUANCE

This airworthiness certificate is issued pursuant to the Federal Aviation Act of 1958 and certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to conform to the type certificate therefor, to be in condition for safe operation, and has been shown to meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation, except as noted herein.
Exceptions:

None

6 TERMS AND CONDITIONS

Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator, this airworthiness certificate is effective as long as the maintenance, preventative maintenance, and alterations are performed in accordance with Parts 21, 43, and 91 of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States.

DATE OF ISSUANCE	FAA REPRESENTATIVE	DESIGNATION NUMBER
01/20/00	E.R. White *E.R. White*	NE-XX

Any iteration, reproduction, or misuse of this certificate may be punishable by a fine not exceeding $1,000 or imprisonment not exceeding 3 years or both.
THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.

FAA Form 8100-2 (8-82)